

Ticks that vector Lyme disease move west into North Dakota

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According to the U.S. Centers for Disease Control, there are more than 300,000 cases of Lyme disease in the U.S. each year. Last year, most Lyme disease cases reported to the CDC were concentrated heavily in the Northeast and upper Midwest, with 96 percent of cases in 13 states. In fact, the disease gets its name from the northeastern town of Lyme, Connecticut, where it was first discovered.

However, a new article published in the *Journal of Medical Entomology* reports that the ticks that vector Lyme disease—*Ixodes scapularis*, also known as [blacklegged ticks](#) or deer ticks—are moving westward, and for the first time have been found to be established in North Dakota. Even worse, [deer ticks](#) that were infected with the bacterium that causes Lyme disease (*Borrelia burgdorferi*) were found as well.

Researchers sampled ticks at nine locations throughout North Dakota by trapping small mammals and then removing the attached ticks. When they found *I. scapularis*, they screened them for *Borrelia burgdorferi* and for two other types of bacteria that can lead to two other tick-borne diseases called Anaplasmosis and Babesiosis.

I. scapularis ticks were collected in six of the nine counties surveyed, and two of the counties seemed to have established populations because all life stages—eggs, larvae, nymphs, and adults—were present.

"This represents an expansion of the predicted range for this tick species and is of concern because of the ability of this tick species to transmit

various disease-causing agents," the authors wrote. "*I. scapularis* and associated pathogens have become established in northeastern North Dakota."

More information: The full article is available at [dx.doi.org/10.1603/ME14053](https://doi.org/10.1603/ME14053)

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